

APPLIED RESEARCH BRANCH

**Strategic
Policy**

**Working
Paper**

**Applied Research Branch
Strategic Policy
Human Resources Development Canada**

**Direction générale de la recherche appliquée
Politique stratégique
Développement des ressources humaines Canada**

The unemployed without recent employment

W-00-4E

by

**Marcel Bédard, Jean-François Bertrand and Louis Grignon
March 2000**

The views expressed in Applied Research Branch papers are the authors' and do not necessarily reflect the opinions of Human Resources Development Canada or of the federal government.

Les opinions exprimées dans les documents de la Direction générale de la recherche appliquée sont celles des auteurs et ne reflètent pas nécessairement le point de vue de Développement des ressources humaines Canada ou du gouvernement fédéral.



The Working Paper Series includes analytical studies and research conducted under the auspices of the Applied Research Branch of Strategic Policy. Papers published in this series incorporate primary research with an empirical or original conceptual orientation, generally forming part of a broader or longer-term program of research in progress. Readers of the series are encouraged to contact the authors with comments and suggestions.

La série des documents de travail comprend des études analytiques et des travaux de recherche réalisés sous l'égide de la Direction générale de la recherche appliquée, Politique stratégique. Il s'agit notamment de recherches primaires, soit empiriques ou originales et parfois conceptuelles, généralement menées dans le cadre d'un programme de recherche plus vaste ou de plus longue durée. Les lecteurs de cette série sont encouragés à faire part de leurs observations et de leurs suggestions aux auteurs.



This document is a translation from French. Although the English version has been carefully prepared, the original document should be taken as correct. This paper is available in French under the title "Les chômeurs sans emploi récent."

Le présent document a été traduit du français. Bien que la version anglaise ait été préparée avec soin, le document original fait foi. La version française du présent document est disponible sous le titre « Les chômeurs sans emploi récent ».

Printed/Imprimé 2001
ISBN: 0-662-29721-0
Cat. No./N° de cat. MP32-28/00-4E

**General enquiries regarding the documents
published by the Applied Research Branch
should be addressed to:**

Publications Office
Applied Research Branch
Strategic Policy
Human Resources Development Canada
165 Hôtel de Ville Street, Phase II, 7th Floor
Hull, Quebec, Canada
K1A 0J2

Telephone: (819) 994-3304
Facsimile: (819) 953-9077
E-mail: research@spg.org
<http://www.hrdc-drhc.gc.ca/arb>

**Si vous avez des questions concernant les
documents publiés par la Direction générale de la
recherche appliquée, veuillez communiquer avec :**

Service des publications
Direction générale de la recherche appliquée
Politique stratégique
Développement des ressources humaines Canada
165, rue Hôtel de Ville, Phase II, 7^e étage
Hull (Québec) Canada
K1A 0J2

Téléphone : (819) 994-3304
Télécopieur : (819) 953-9077
Courrier électronique : research@spg.org
<http://www.hrdc-drhc.gc.ca/dgra>

Abstract

The number of unemployed individuals without recent employment is almost three times as large as the number of long-term unemployed individuals. The category of unemployed individuals without recent employment, which includes, in addition to the long-term unemployed, young people looking for their first job and people who are looking for a job after an extended period of absence from the labour market, is the largest category of unemployed workers not eligible for Employment Insurance; it is the group that grew the fastest during the 1990s.

The objective of this document is to answer the following questions: (1) Who are the unemployed individuals without recent employment (i.e., the unemployed individuals who have not worked in the past 12 months)? and (2) Why did their share of total unemployment almost double during the 1990s? To find the answers, the study used data from Statistics Canada's Labour Force Survey and new Employment Insurance Coverage Survey.

The study found that there is no one unique description for this category of unemployed individuals without recent employment. In fact, this category of unemployed workers includes people whose labour market attachment and personal, financial and family circumstances vary widely.

The steep rise in the percentage of unemployed without recent employment noted during the 1990s – their percentage doubled between 1989 and 1997 from 19 percent to 38 percent before dropping to 34 percent in 1999 – seems to be only partly related to the variation in the rate of unemployment during this period. The results of the study suggest that, even if the current economic recovery were to continue for a few years, the relative size of this category would likely not decrease to the level it was at in 1989 before the beginning of the last recession.

If the increase in this category of unemployed individuals reflects an actual increase in problems entering or re-entering the labour market for a growing number of people, and not an artificial phenomenon created by reclassifying non-labour force participants as unemployed, it could be useful to create new programs to help this new group of people who are excluded from the labour market.

Résumé

Les chômeurs sans emploi récent sont presque trois fois plus nombreux que les chômeurs de long terme. Ce groupe de chômeurs, qui comprend en plus des chômeurs de long terme, les jeunes en quête d'un premier emploi et les personnes qui se cherchent un emploi après une période d'absence prolongée du marché du travail, constitue la catégorie la plus importante de chômeurs inéligibles à l'assurance-emploi et celle qui a augmenté le plus rapidement au cours des années 1990.

L'objectif de ce document est de répondre aux deux questions suivantes : (1) Qui sont les chômeurs sans emploi récent (i.e., : les chômeurs qui n'ont pas occupé d'emploi au cours des 12 derniers mois)? et (2) Qu'est-ce qui explique que leur proportion du chômage total a presque doublé au cours des années 1990? Pour ce faire, l'étude utilise les données de l'Enquête sur la population active et de la nouvelle Enquête sur la couverture de la population par l'Assurance-emploi de Statistique Canada.

Il ressort de cette étude qu'il n'y a pas un portrait unique qui se dégage de l'analyse des chômeurs sans emploi récent. En effet, cette catégorie de chômeurs regroupe des personnes dont l'attachement au marché du travail, les circonstances personnelles, financières et familiales sont très différentes les unes des autres.

La forte hausse de la proportion des chômeurs sans emploi récent observée pendant les années 1990 – leur proportion a doublé entre 1989 et 1997, passant de 19 percent à 38 percent, avant de redescendre à 34 percent en 1999 – ne seraient que partiellement reliée à l'évolution du taux de chômage au cours de cette période. Les résultats de l'étude suggèrent que même une prolongation de quelques années de la reprise économique actuelle ne réduirait vraisemblablement pas l'ampleur du phénomène au niveau où il était en 1989 avant le début de la dernière récession.

Si l'augmentation de cette catégorie de chômeurs reflète un accroissement véritable des difficultés d'intégrer ou de réintégrer le marché du travail pour un nombre croissant de personnes et non un phénomène artificiel de reclassification des inactifs vers le statut de chômeurs, il pourrait être souhaitable de créer des ponts additionnels vers l'emploi ciblés de façon à aider ces nouveaux exclus du marché du travail.

Acknowledgements

The authors would like to thank Mario Seccaracia and Dwayne Benjamin for their comments on a preliminary draft of this document presented at the Centre for the Study of Living Standards' April 1999 conference on the structural aspects of unemployment in Canada. The authors also wish to thank Richard Archambault for his comments and Costa Kapsalis for analysing, compiling and processing the data from Statistics Canada's Employment Insurance Coverage Survey.

Table of contents

1. Introduction.....	1
2. Phenomenon under observation	3
3. Data sources and analytical framework	5
3.1 Data sources	5
3.2 Analytical framework	5
4. Who are the unemployed without recent employment?	7
4.1 Main activity prior to unemployment spell.....	7
4.2 Unemployed who were working prior to their unemployment spell.....	8
4.3 Unemployed who were managing a home prior to their unemployment spell	9
4.4 Unemployed who were studying prior to their unemployment spell	11
4.5 Unemployed who were engaging in another activity prior to their unemployment spell.....	14
4.6 Summary	15
5. What explains the increase in the proportion of unemployed without recent employment?	17
5.1 Which groups of the unemployed population have contributed most to the increase in the proportion of unemployed without recent employment?	17
5.2 Composition effect?.....	18
5.3 Will the increase in the proportion of unemployed without recent employment subside if the economy continues to perform well?	21
5.4 What is the scope of this structural change?	25
5.5 Avenues for research on possible structural causes	29
6. Conclusions.....	33
Appendix A: Tables	35
Appendix B: Estimated extent of structural break in relationship between the proportion of unemployed without recent employment and the unemployment rate	38



1. Introduction

All economists are familiar with the concept of long-term unemployment, which denotes people who have been unemployed for more than 12 consecutive months. These unemployed individuals comprise a category that is of particular concern from the standpoint of employment and social policy. They are often associated with structural problems relating to employability, with the phenomenon of persistence and, thus, with structural unemployment. But the present document does not focus primarily on long-term unemployment; rather, it looks at a category of unemployed individuals that differs from the long-term unemployed: unemployed individuals without recent employment, i.e., those who have not worked in more than 12 months.

Those who are long-term unemployed have not worked in over 12 consecutive months. These are people who looked for and were available for work during each of the past 12 months. They comprise a subset of the unemployed without recent employment category. The unemployed without recent employment have not necessarily looked for work during each of the past 12 months as they may have engaged in another activity. Furthermore, not all the unemployed without recent employment have lost their job. Some people may be entering the labour market for the first time, while others may be re-entering the labour market after an interruption of more than 12 months for family-related or other obligations. However, they all have one thing in common: none has worked over the last 12 months, and the vast majority are not (or no longer) eligible for Employment Insurance benefits.

On average, 411,000 unemployed had not worked over the last 12 months during 1999. This category of unemployed individuals saw its share of total unemployment increase substantially during the 1990s, from 21 percent in 1989 to 34 percent in 1999. The new Employment Insurance Coverage Survey (EICS) indicates that this is the main reason why many unemployed are not eligible for Employment Insurance benefits. People in this category of unemployed are not eligible because they have not worked recently – paid employment being the basis for establishing a benefits period – and because the maximum duration of the benefits period is 52 weeks.

The purpose of this paper is to gain a better understanding of this phenomenon by examining who these unemployed individuals are and why their share of total unemployment almost doubled in the 1990s.

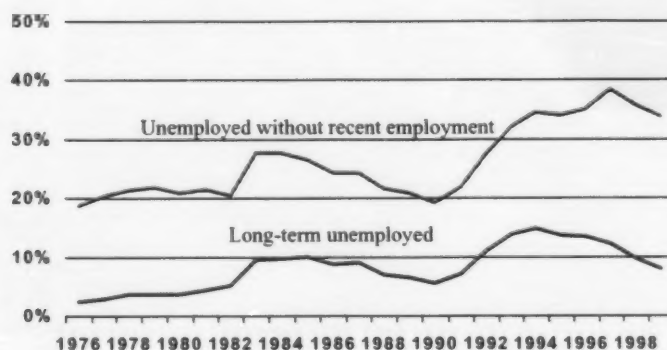
The rest of the document is structured as follows: Section 2 describes changes in the number of unemployed according to the two concepts of unemployment discussed previously. Section 3 describes the data sources and analytical framework used in this study, while Sections 4 and 5 present the results of our analyses. Section 6 presents our conclusions.

2. Phenomenon under observation

As we stated in the introduction, the unemployed without recent employment category differs from the long-term unemployed category. First, there are far more unemployed without recent employment than long term unemployed. In fact, the unemployed without recent employment accounted for 34 percent of all unemployed in 1999, compared to 8 percent for the long-term unemployed.

Second, while both phenomena are on the rise and showing major fluctuations of a seemingly cyclical nature, as shown in Figure 1, we see that the proportion of long-term unemployed has declined since 1994, while the proportion of unemployed without recent employment continued to rise, peaking in 1997 before slowly dropping since 1998.

Figure 1.
Unemployed without recent employment versus
long-term unemployed

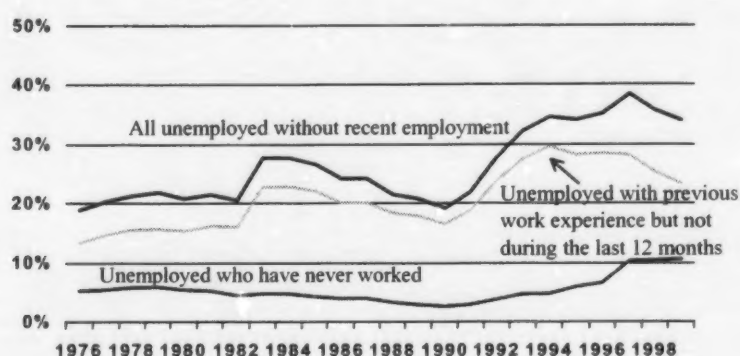


Source: Labour Force Survey

Moreover, the unemployed without recent employment category includes a large number of unemployed who are entering the labour market for the first time and therefore have no prior employment experience. In 1999, unemployed who had never worked accounted for 31 percent of unemployed without recent employment, compared to 9 percent of long-term unemployed. The remaining 69 percent of unemployed without recent employment have previous employment experience, though not over the last 12 months.

Figure 2 breaks down the evolutions in the unemployed without recent employment's share of total unemployment by the presence or lack of previous employment experience. As we can see, this breakdown reveals a very different set of movements between the two groups of unemployed individuals.

Figure 2.
Unemployed without recent employment by presence
or lack of previous work experience



Source: Labour Force Survey

Evolution in the proportion of unemployed individuals with previous work experience, but not over the last 12 months, resembles very closely the evolution in the proportion of long-term unemployed shown in Figure 1. As for the proportion of unemployed who have never worked, its movements are very different. In fact, the proportion of unemployed who have never worked, unlike those who have previous work experience, does not seem obedient to cyclical fluctuations. Furthermore, it has risen sharply throughout the 1990s. In fact, after 1994 the increase in the number of unemployed without recent employment has been due entirely to the increase in the number of unemployed entering the labour market for the first time.

3. Data sources and analytical framework

3.1 Data sources

In the following pages, we will examine in detail the characteristics of the unemployed without recent employment and the evolutions in their share of total unemployment in the 1990s with the help of two data sources.

The first is Statistics Canada's Labour Force Survey (LFS), which is the main source of information on the labour force, employment and unemployment in Canada. The LFS provides the chronological data needed to analyse the evolutions in the proportion of unemployed without recent employment over the period from 1976 to 1999.

The LFS also enables us to paint a detailed socio-economic picture of who the unemployed without recent employment are, while providing information on how long it has been since they were employed and the duration of their unemployment spell.

The second source of data used is the new Employment Insurance Coverage Survey (EICS). The EICS is a quarterly survey conducted by Statistics Canada on behalf of Human Resources Development Canada. As a supplement to the LFS, it is designed to obtain information on who receives Employment Insurance benefits, who does not, and the reasons why certain unemployed individuals do not receive EI. In addition, the EICS asks respondents about their financial situation and resources, details surrounding the end of their last employment, their job search intensity and other matters. The EICS enabled us to complete the socio-economic profile of the unemployed without recent employment. At the time our study went to press, the EICS data for 1999 were not available. Consequently, Section 4 analyses the phenomenon for 1998 only.¹

3.2 Analytical framework

Our strategy in answering the two questions of interest to us is as follows: First, we chose to break down the unemployed without recent employment according to their main activity prior to unemployment (the four categories are worked, studied, managed a home and another activity). The reason we chose to do so lies in the apparently very heterogeneous nature of unemployed

¹ On average, there were 468,000 unemployed without recent employment in 1998. This category of unemployed individuals accounted for 36 percent of the total unemployed population during that year.

without recent employment. This group comprises long-term unemployed, unemployed who have temporarily left the labour market (to assume family or other responsibilities) and unemployed individuals entering the labour market for the first time.

We examine who these unemployed are by preparing their socio-economic profile according to their main activity prior to unemployment. For each subgroup, we have analysed the following socio-economic characteristics:

- age
- sex
- province of residence
- whether the unemployed person has previous work experience
- duration of unemployment spell (short-term, long-term)
- level of education
- whether the unemployed person has received EI benefits since the person's last employment
- whether the household received social assistance
- main source of household income
- sufficiency of household income for meeting regular expenses.

The first five socio-economic characteristics (age, sex, province, previous work experience, duration of unemployment and level of education) are taken from the LFS, while the four others (Employment Insurance, social assistance, main source of income and income sufficiency) are taken from the EICS. As we indicated earlier, the analysis of the socio-economic profiles that is presented in Section 4 is based solely on 1998 data, because EICS 1999 data were not available by the time this study was first published.

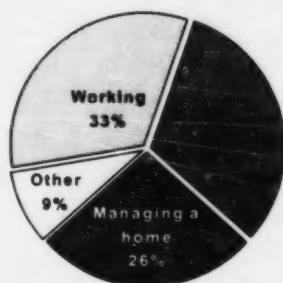
The analysis of the changes in the proportion of unemployed without recent employment consists of verifying with the help of chronological series whether the increase in this proportion during the 1990s was of a cyclical nature, a structural nature or the product of a composition effect. A detailed explanation of our methodology can be found in Section 5 of this study.

4. Who are the unemployed without recent employment?

4.1 Main activity prior to unemployment spell

When interviewers from Statistics Canada's Labour Force Survey asked the 1998 unemployed without recent employment to indicate their main activity before their unemployment spell, only 33 percent cited that they were working. What were the others doing? Figure 3 shows that 32 percent replied that they were studying and 35 percent neither studying nor working. Of that 35 percent, 26 percent were at home and 9 percent were engaged in another activity.

Figure 3.
Main activity prior to unemployment spell of the
unemployed without recent employment, 1998



Percentage distribution

Source: Labour Force Survey

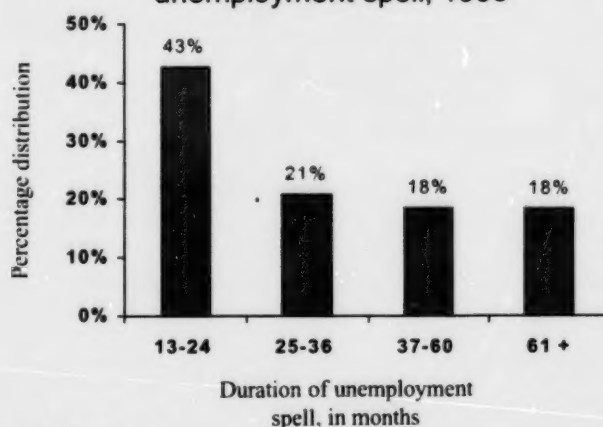
Thus, the vast majority (nearly 70 percent) of unemployed without recent employment did not work before becoming unemployed. Let us look now at the characteristics of each of these subgroups of unemployed individuals.

Detailed profiles on each subgroup of unemployed without recent employment can be found in Tables A1 and A2 of Appendix A. The results of the following analysis are taken from these two tables.

4.2 Unemployed who were working prior to their unemployment spell

In 1998, the unemployed without recent employment who were working before their unemployment spell accounted for one third of all unemployed without recent employment. As shown in Table 1, these unemployed workers are generally long-term unemployed. In fact, the vast majority (74 percent) of this category of unemployed have been looking for work for at least 12 consecutive months. The others are not considered long-term unemployed because they have withdrawn from the labour force since their last employment. For example, it is possible that individuals receiving severance pay may have temporarily postponed their job search and nonetheless declared work as their main activity before becoming unemployed. Moreover, the majority of unemployed individuals belonging to this group have been out of work for a very long time. In fact, nearly 60 percent of unemployed individuals in this category have been without work for over two years (see Figure 4).

Figure 4.
Unemployed without recent employment who were
working before becoming unemployed, by duration of
unemployment spell, 1998



Source: Labour Force Survey

In addition, the likelihood that these unemployed workers will encounter financial difficulties is particularly high. Table 1 shows that 39 percent of households with one member belonging to this category of unemployed received social assistance and 54 percent reported that they did not have sufficient income to cover their regular monthly expenses.

One potential source of difficulty for this group of unemployed could be their low level of education. In 1998, one third of unemployed without recent employment who worked before unemployment had not finished high school, compared to 19 percent for the labour force as a whole. That said, the level of education of this group of unemployed individuals is no worse than the level of the unemployed population as a whole, and even a bit better than that of the unemployed without recent employment (30 percent in 1998).

Table 1: The unemployed without recent employment who were working before becoming unemployed. Percentage distributions by selected characteristics, 1998

Number of unemployed: 152,200	
Duration of unemployment	
Short-term	25.7
Long-term	74.3
Level of education	
Did not finish high school	33.3
High school diploma	20.8
Some post-secondary	8.7
Post-secondary degree	37.1
Main source of income	
Parents	9
Employment income ⁽¹⁾	24
Employment Insurance ⁽¹⁾	0
Social assistance	39
Other	27
Not available	0
Insufficient income⁽²⁾	54
(1) ... of spouse or other household members.	
(2) Household income is insufficient to meet all or most of their regular monthly expenses. This variable does not take into account respondents who receive financial support from their parents.	

Source: Table A1

4.3 Unemployed who were managing a home prior to their unemployment spell

In 1998, the unemployed without recent employment who were managing a home before becoming unemployed accounted for 26 percent of all the unemployed without recent employment.

As shown in Table 2, most of the unemployed without recent employment who were managing a home before becoming unemployed are women returning to the labour market after an absence of more than 12 months. In fact, 83 percent of the unemployed individuals in this category are women, and 80 percent have work experience prior to their unemployment spell. Contrary to the unemployed who worked before becoming unemployed, only 22 percent of those who managed a home prior to their unemployment spell were looking for work for more than a year. These individuals also have a relatively high likelihood of experiencing financial hardship. In fact, as shown in Table 2, 40 percent of the households with a member belonging to this category of unemployed received social assistance and 32 percent reported insufficient income to meet their regular monthly expenses.

Table 2: The unemployed without recent employment who were managing a home before becoming unemployed. Percentage distributions by selected characteristics, 1998

Number of unemployed: 122,000	
Sex	
Male	16.7
Female	83.3
Previous work experience	79.6
Level of education	
Did not finish high school	35.4
High school diploma	23.7
Some post-secondary	8.6
Post-secondary degree	32.3
Duration of unemployment spell	
Short-term	78.5
Long-term	21.5
Main source of income	
Parents	3
Employment income ⁽¹⁾	43
Employment Insurance ⁽¹⁾	1
Social assistance	40
Other	13
Not available	0
Insufficient income⁽²⁾	32

(1) ... of spouse or other household members.
 (2) Household income insufficient to meet all or most of their regular monthly expenses. This variable does not take into account respondents who receive financial support from their parents.

Source: Table A1

As in the case of unemployed without recent employment who worked prior to their unemployment spell, the unemployed without recent employment who were managing a home are on average less educated than the labour force population as a whole. More than 35 percent of these unemployed did not finish high school, compared to 19 percent of the labour force population as a whole and 33 percent for the unemployed population as a whole.

4.4 Unemployed who were studying prior to their unemployment spell

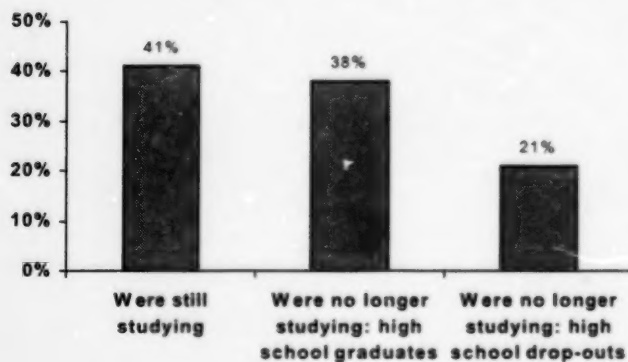
In 1998 there were 146,000 unemployed without recent employment who were studying before becoming unemployed, accounting for 32 percent of all the unemployed without work for over 12 months. Of this number, 65 percent had no previous work experience and nearly 90 percent had been looking for work for less than 12 months. This category of unemployed seems to encounter fewer financial difficulties than the other categories of unemployed without recent employment since most of them (54 percent) rely on their parents' financial support for a living (see Table A1).

It is among this group of unemployed that we find the highest proportion of individuals who have not completed high school. In 1998, over 50 percent of unemployed without recent employment who were studying before unemployment had not finished high school. However, as a more detailed analysis will reveal below, the high percentage of these unemployed without a high school diploma is largely due to many of them being young high school students looking for a part-time job during the school year.

An analysis of the activities of these unemployed, using data from the LFS, identifies three distinct groups of unemployed without recent employment who were studying prior to their unemployment. As we can see in Figure 5, 41 percent of these unemployed individuals were still in school during the LFS reference week and, of this number, nine out of ten were studying full-time and were therefore looking for part-time employment. The other unemployed individuals who were studying before becoming unemployed had quit school. Nearly 32,000 of these young unemployed – accounting for about one fifth of the unemployed who were studying prior to their unemployment spell – were high school dropouts (i.e., they no longer attended school and have not obtained a high school diploma). As for the remaining 38 percent, they are in transition

between school and the labour market (i.e., they no longer attend school and have obtained at least a high school diploma).

Figure 5.
Unemployed without recent employment who were
studying prior to their unemployment spell, 1998



Source: Labour Force Survey

The unemployed without recent employment who were studying full-time during the LFS reference week totalled 51,600 in 1998. The vast majority of these unemployed are young people – high school students with no previous work experience. Over 75 percent of the unemployed belonging to this group have yet to finish high school, nearly four out of five have never worked and nearly 80 percent are between the ages of 15 and 19.

In 1998, the unemployed without recent employment who studied on a part-time basis at the time of the LFS accounted for slightly over 5 percent of the unemployed without recent employment who were studying before becoming unemployed. Their characteristics differ greatly from those of the unemployed studying full-time at the time of the LFS. In fact, the unemployed without recent employment who studied part-time are generally more educated and have more work experience than the unemployed who studied full-time. Over 63 percent have obtained at least a high school diploma – of these, 29 percent have received a post-secondary degree. In addition, more than half of these individuals have previous work experience. They are also older; nearly half of the individuals belonging to this group are over the age of 25.

The unemployed in transition from school to the labour market – i.e., they have at least finished high school but are no longer going to school – numbered 54,700 in 1998. These unemployed resemble much more closely the unemployed who were part-time students than those studying full-time when LFS was administered. In fact, the bulk (56 percent) of the unemployed in transition towards the labour market have previous work experience. Also, nearly half of those belonging to this group are over the age of 25.

Finally, the unemployed without recent employment who are no longer attending school without finishing high school – the dropouts – possess similar characteristics, in some respects, to those who were still full-time students at the time of the LFS. They are young and have very little work experience. Nearly three out of four dropouts are under the age of 20, and only 23 percent have previous work experience. However, contrary to the unemployed who studied full-time, the dropouts no longer attend school.

Table 3: The unemployed without recent employment who were studying before becoming unemployed. Percentage distributions by selected characteristics, 1998

	Full-time students	Part-time students	In transition	Dropouts
Number of unemployed:	51,600	7,600	54,700	32,000
Age				
15 – 19	86.0	34.8	21.0	74.6
20 – 24	8.7	17.9	31.4	14.7
25 +	5.3	47.3	47.6	10.8
Previous work experience	18.9	51.8	56.1	23.1
Level of education				
Did not finish high school	75.2	36.4	0.0	100.0
High school diploma	6.2	15.8	28.5	0.0
Some post-secondary	12.8	19.0	23.2	0.0
Post-secondary degree	5.8	28.9	48.3	0.0

Source: Table A2

Box 1:**How can a student be considered unemployed?**

According to Statistics Canada's Labour Force Survey (LFS), a full-time student who is looking for a part-time job and who is *available* for work is considered unemployed.

Similarly, a part-time student who is looking for full- or part-time work and who is *available* for work is also considered unemployed. However, Statistics Canada does not consider a full-time student who is looking for a full-time job to be unemployed; rather, this student is outside the labour force.

In 1998, among students aged 15 and older, there were 118,000 full-time students looking for a part-time job and 38,000 part-time students were looking for a full- or part-time job, for a total of 156,000 unemployed students out of a total student population of 2.6 million.

4.5 Unemployed who were engaging in another activity prior to their unemployment spell

The last group of unemployed without recent employment were engaging in an activity other than working, studying or managing a home before becoming unemployed. There were 41,000 such unemployed in 1998 which accounted for 9 percent of the unemployed without recent employment category as a whole. Their main characteristics are summarized in Table 4. These unemployed are mainly men (73.1 percent); most have previous work experience (64 percent) and are re-entering the labour market after an absence of more than 12 months; and 24 percent have been looking for work for longer than 12 months. Finally, 20 percent of households with a member belonging to this category of unemployed received social assistance; of these, 47 percent reported insufficient household income to meet their regular monthly expenses.

As is the case with the other groups, the unemployed without recent employment who were engaging in another activity before becoming unemployed are less educated than the rest of the unemployed and the labour force population in general. Thirty-six percent of these unemployed individuals have not finished high school.

Table 4: The unemployed without recent employment who were engaging in another activity before becoming unemployed. Percentage distributions by selected characteristics, 1998

Number of unemployed: 41,500	
Sex	
Male	73.1
Female	23.9
Previous work experience	64.4
Duration of unemployment	
Short-term	75.8
Long-term	24.2
Level of education	
Did not finish high school	38.4
High school diploma	18.1
Some post-secondary	6.8
Post-secondary degree	36.7
Main source of income	
Parents	12
Employment income ⁽¹⁾	36
Employment Insurance ⁽¹⁾	4
Social assistance	20
Other	27
Not available	1
Insufficient income⁽²⁾	47
(1) ... of spouse or other household members.	
(2) Household income insufficient to meet all or most of their regular monthly expenses. This variable does not take into account respondents who receive financial support from their parents.	

Source: Table A1

4.6 Summary

Therefore, the analysis does not yield a single profile of unemployed without recent employment. This category of unemployed who are for the most part not eligible for EI benefits and whose number ballooned in the 1990s includes people whose labour market attachment and personal financial and family circumstances vary widely.

In the absence of a single profile, there is one characteristic which all these groups of unemployed seem to have in common, one that may reflect a genuine increase in the difficulties encountered when entering or returning to the labour market for a growing number of unemployed and, more specifically, for students looking for work while attending school and for

high school dropouts. It is the high proportion of people without a high school diploma. Looking at the unemployed without recent employment group as a whole, over 40 percent have not finished high school, compared to 33 percent for the unemployed population as a whole and 19 percent for the labour force population as a whole.

Moreover, the unemployed without recent employment group accounted for over 42 percent of all unemployed without a high school diploma in 1998, 20 percentage points higher than in 1990 (see Table 5). This finding is particularly troubling given the strong decline in the number and proportion of these unemployed in the 1990s – among both the unemployed population as a whole (from 42 percent of unemployed in 1990 to 33 percent in 1999) and the whole of the labour force (from 28 percent in 1990 to 19 percent in 1998).

The 20 percentage point increase in the proportion of unemployed without a high school diploma among the unemployed without recent employment is by 60 percent attributable to the increase in the number of unemployed who were studying prior to their unemployment spell. In 1998 the number of unemployed without recent employment who had not finished high school and who were studying before becoming unemployed more than tripled as a percentage of all unemployed without a high school diploma (from 4.7 percent in 1990 to 16.8 percent in 1998). Of the latter group, more than half (56 percent) were high school students; the others (44 percent) were high school dropouts.

Table 5: Unemployed individuals without a high school diploma, 1990 - 1998

	1990 (000)	1998 (000)	1990 (percent)	1998 (percent)
Unemployed without a high school diploma	494.4	437.2	100.0	100.0
With recent employment	385.7	251.8	78.1	57.6
Without recent employment	108.7	185.4	22.0	42.4
Working prior to their unemployment spell	39.6	50.7	8.1	11.6
Managing a home	27.2	43.2	5.5	9.9
Engaging in another activity	17.6	15.9	3.6	3.6
Were studying	23.1	73.6	4.7	16.8
Were still studying	12.1	41.6	2.4	9.5
Were dropouts	11.0	32.0	2.2	7.3

Source: Labour Force Survey

5. What explains the increase in the proportion of unemployed without recent employment?

The increase in the proportion of unemployed without recent employment could have resulted from several factors or a combination of these factors. It could very well be the result of an increase in the importance of certain groups in the labour force (e.g., the student population), in which case the increase would be the result of a composition effect. It could have resulted from the effect of the latest recession (i.e., 1990-1991) and the slowness of the recovery, in which case the increase could be attributed to cyclical factors. It could also be the result of a change in the behaviour of the individuals caused by such factors as the changes made to provincial social assistance or other programs, in which case the increase could be considered structural in nature.

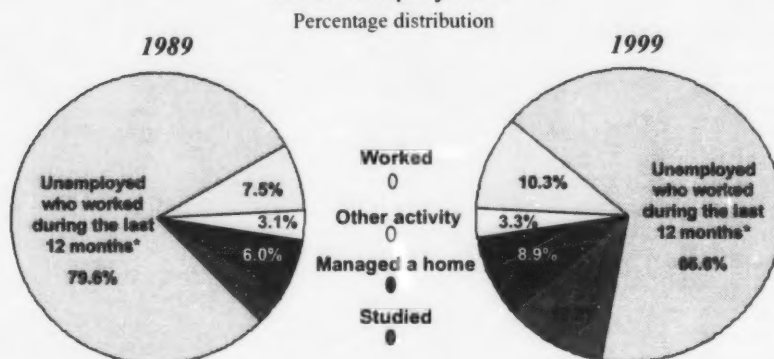
This section begins by identifying the groups of unemployed who contributed the most to the increase in the proportion of unemployed without recent employment. Then it examines the three above-noted theories to explain the increase in this proportion over the period of 1989 to 1999.

5.1 Which groups of the unemployed population have contributed most to the increase in the proportion of unemployed without recent employment?

Figure 6, which breaks down unemployment in 1989 and 1999, indicates that the unemployed who were studying before becoming unemployed are the main contributors to the increase in the proportion of unemployed without recent employment. In 1989, 40,000 unemployed without recent employment were studying before becoming unemployed, accounting for 3.8 percent of total unemployment. By 1999, this figure had more than tripled (132,000), accounting for nearly 11 percent of all the unemployed in Canada.

The proportion of total unemployment made up by the unemployed without recent employment who were managing a home before becoming unemployed rose by 2.9 percentage points during this period, from 6 percentage points (64,000 individuals) in 1989 to 8.9 percentage points (108,000 individuals) in 1999.

Figure 6.
Total unemployment and the unemployed without recent employment



* includes unemployed who will start a job in the next four weeks

Source: Labour Force Survey

The unemployed who worked prior to their unemployment spell contributed the third most to the increase in the proportion of unemployed without recent employment during the 1990s. In 1989, they numbered 81,000 and accounted for 7.5 percent of total unemployment. By 1999, this proportion had reached 10.3 percent, up 2.8 percentage points.

Finally, the proportion of the total unemployed population made up by the unemployed without recent employment who engaged in another activity before becoming unemployed changed very little during the 1990s, slightly increasing from 3.1 percent of total unemployment in 1989 to 3.3 percent in 1999.

5.2 Composition effect?

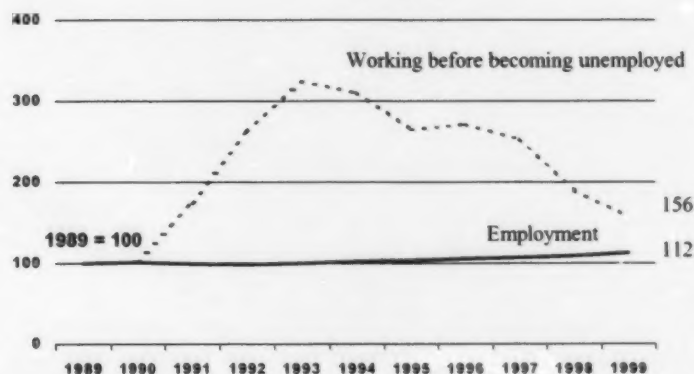
Is the increase in the proportion of unemployed without recent employment the result of a composition effect? To analyse this hypothesis, we compared the evolution in the number of unemployed without recent employment by main activity prior to their unemployment spell with the evolution in the source population for each category of unemployed between 1989 and 1999. The source population is the pool of people from which each category of unemployed originates. For example, the source population for unemployed individuals who were studying prior to their unemployment spell is the student population as a whole. An increase in the population of unemployed individuals comparable to that of the source population is indicative of a probable composition effect.

Other source populations used to establish comparisons were: employment for the unemployed who worked before becoming unemployed, and the population of 15- to 64-year-olds without a job and not in school for the unemployed individuals who were managing a home and had another activity prior to their unemployment spell.

Figures 7 to 9 compare the evolutions in the number of unemployed by main activity prior to their unemployment spell with the increase in their respective source population. The data presented in these figures are normalized so that the year 1989 equals 100.

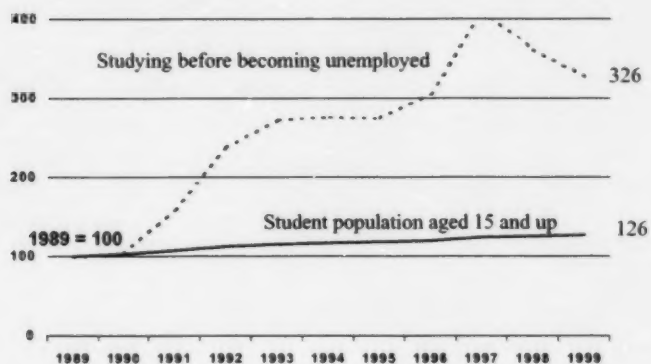
Figures 7 to 9 reveal that the increase in the number of unemployed without recent employment is much greater than the growth of their respective source, regardless of the main activity prior to their unemployment spell. The number of unemployed who worked before becoming unemployed was up 56 percent between 1989 and 1999, while employment rose by only 12 percent over that same period (Figure 7). The number of unemployed who were studying prior to their unemployment spell rose by 226 percent between 1989 and 1999, while the student population increased by only 26 percent during the same period (Figure 8). Finally, Figure 9 shows that over the same period, the number of unemployed who were managing a home or engaged in another activity prior to their unemployment spell rose by 54 percent, while the population of 15- to 64-year-olds without a job increased by a mere 11 percent.

Figure 7.
Growth in population of unemployed without recent employment who were working before becoming unemployed



Source: Labour Force Survey

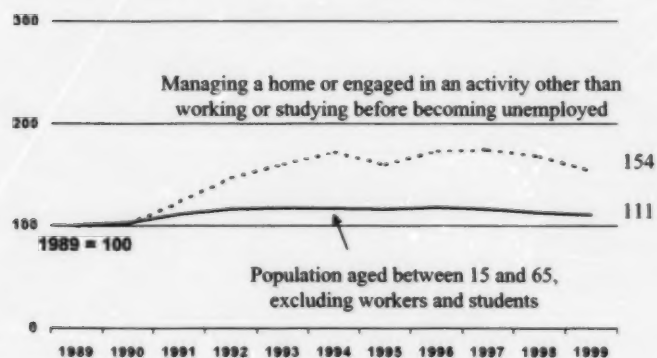
Figure 8.
Growth in population of unemployed without recent employment who were studying prior to their unemployment spell



Source: Labour Force Survey

Based on these results, we can conclude that the increase in the proportion of unemployed without recent employment is not primarily due to an increase in the relative importance of the underlying (or source) populations, but rather to the growing incidence of the phenomenon of being without recent employment among these populations.

Figure 9.
Growth in population of unemployed without recent employment who managed a home or engaged in other activities before becoming unemployed

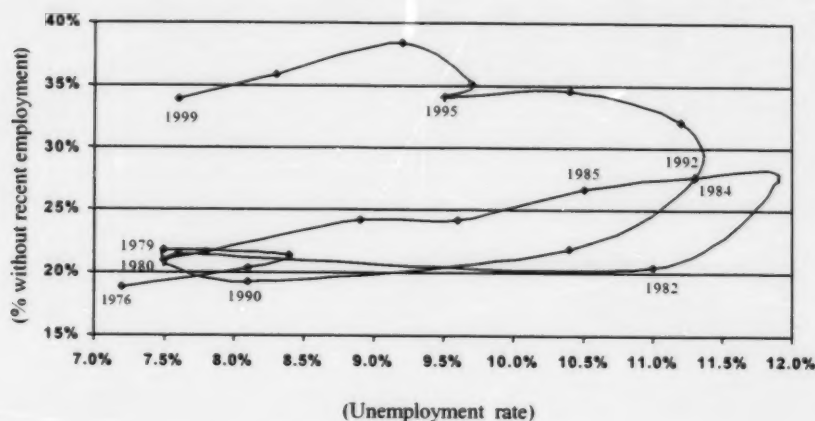


Source: Labour Force Survey

5.3 Will the increase in the proportion of unemployed without recent employment subside if the economy continues to perform well?

Figure 10 illustrates the relationship between the evolution in the proportion of unemployed without recent employment and the evolutions in the rate of unemployment for the period of 1976 to 1999. It seems that since the 1990-1991 recession, this relationship has changed.

Figure 10.
Proportion of unemployed without recent employment
and unemployment rate, 1976 to 1999



Source: Authors' calculations based on data from Labour Force Survey

In 1980, the unemployment rate was 7.5 percent and the proportion of unemployed without recent employment was 20.9 percent. Unemployment rose during the recession of the early 1980s, peaking at 11.9 percent in 1983. By then, the proportion of unemployed without recent employment had also risen to 27.7 percent. After 1983, the unemployment rate steadily declined, returning to 7.5 percent in 1989. Meanwhile, the proportion of unemployed without recent employment also declined, dropping to 20.8 percent in 1989. At this point, the unemployment rate and the proportion of unemployed without recent employment had both returned to their pre-recession level.

As was the case during the 1980s, the 1990s began with a severe recession. The ensuing recovery was slow, but by 1999 the unemployment rate had returned to where it had been prior to the recession of 1990-1991. Thus, if we extrapolate from the 1980s relationship between the proportion of unemployed without recent employment and the rate of unemployment, the

proportion of unemployed without recent employment in 1999 should have returned to a level comparable to the level prior to the 1990-1991 recession. However, as shown in Figure 10, that is not the case.

In fact, unemployment rose during the 1990-1991 recession, peaking at 11.3 percent in 1992. During this time, the proportion of unemployed without recent employment also rose to 32.1 percent. After 1992, the employment situation began to improve. Between 1993 and 1995, the unemployment rate dropped to 9.5 percent. However, the proportion of unemployed without recent employment continued its ascent, accounting for 34.6 percent of all unemployed individuals in 1994. It was not until 1995 that the proportion of unemployed without recent employment began to decline. However, the minor economic slowdown which occurred in 1996 apparently had a negative effect on the proportion of unemployed without recent employment. In fact, the 0.2 percentage point increase in the unemployment rate between 1995 and 1996 was followed by an increase of more than 4 percentage points in the proportion of unemployed without recent employment between 1995 and 1997. After 1996, the unemployment rate began to drop again, reaching 7.6 percent in 1999. It was not until 1998 that the proportion of unemployed without recent employment began once again to decline, to reach 33.9 percent in 1999. Thus, despite the fact that the 1999 unemployment rate is very similar to what it was in 1989, the proportion of unemployed without recent employment is 13 percentage points higher in 1999 than it was in 1989.

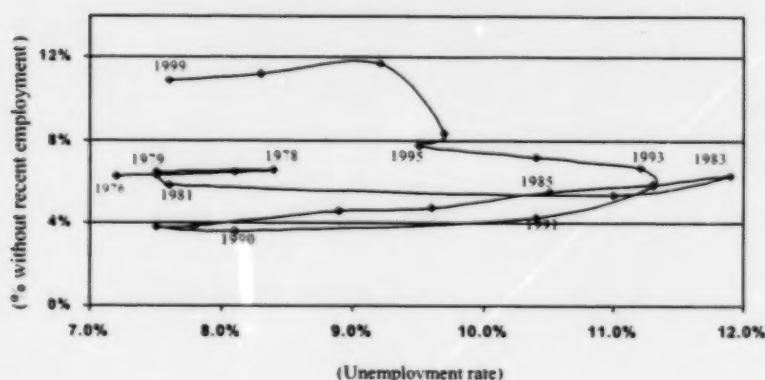
This observation suggests that there was a structural change in the relationship between the proportion of unemployed without recent employment and the unemployment rate, particularly since the brief economic slowdown that occurred between 1995 and 1996. This suggests that it is unlikely that the proportion of unemployed without recent employment will decline to a level similar to that prior to the 1990-1991 recession, even if the economic situation continues to improve.

The structural change observed in the relationship between the proportion of unemployed without recent employment and the unemployment rate is particularly evident among the unemployed without recent employment who were studying and who were managing a home before becoming unemployed. In the case of unemployed without recent employment who were

working prior to their unemployment spell, the structural change is present, but not to the extent that it is among the other categories of unemployed without recent employment.

In fact, for the unemployed without recent employment who were studying or managing a home prior to their unemployment spell, we observed a major break in the relationship between the proportion of unemployed without recent employment and the unemployment rate after 1995.

Figure 11.
Proportion of unemployed without recent employment who
were studying before becoming unemployed and
unemployment rate, 1976 to 1999



Source: Authors' calculations based on data from Labour Force Survey

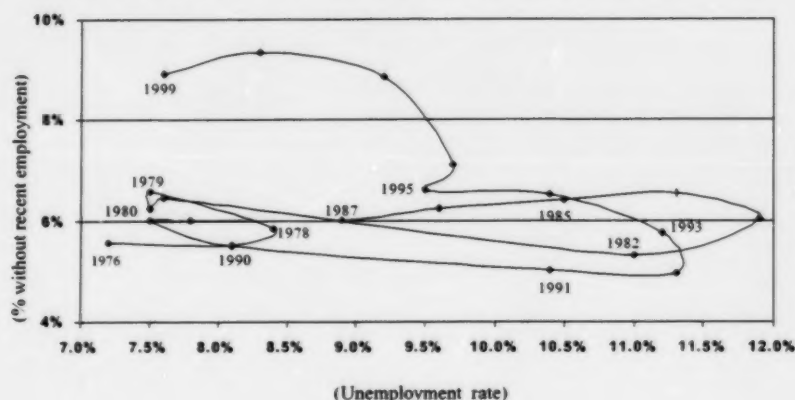
In the case of unemployed without recent employment who were studying prior to their unemployed spell (Figure 11), the 0.2 percentage point rise in the unemployment rate during the economic slowdown of 1996 was accompanied by an increase of nearly 4 percentage points in the proportion of unemployed without recent employment who were studying before becoming unemployed.

As for the unemployed without recent employment who were managing a home prior to their unemployment spell (Figure 12), the slight increase in the unemployment rate observed during the 1996 slowdown was accompanied by an increase of nearly 3 percentage points in their proportion of the unemployed without recent.

These observations suggest an important structural change in the relationship between the proportion of unemployed without recent employment who were studying and who were

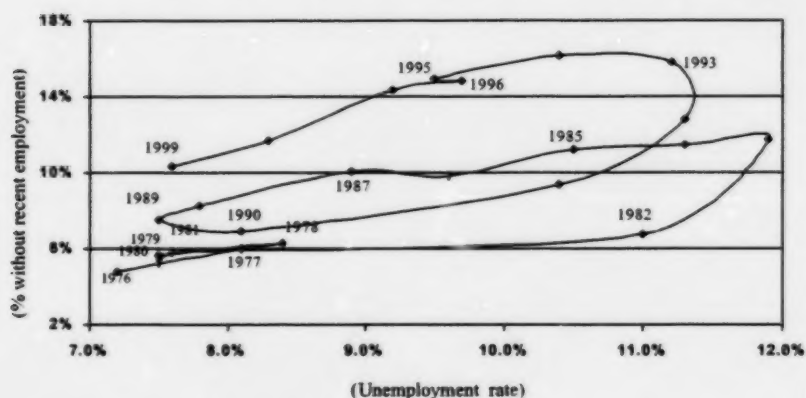
managing a home prior to their unemployment spell and the unemployment rate since the last recession. Therefore, it is highly unlikely that the proportion of unemployed without recent employment who were studying and were managing a home before becoming unemployed will decline to a level similar to the 1989 level.

Figure 12.
Proportion of unemployed without recent employment
who were managing a home before becoming
unemployed and unemployment rate, 1976 to 1999



Source: Authors' calculations based on data from Labour Force Survey

Figure 13.
Proportion of unemployed without recent employment
who were working before becoming unemployed and
unemployment rate, 1976 to 1999



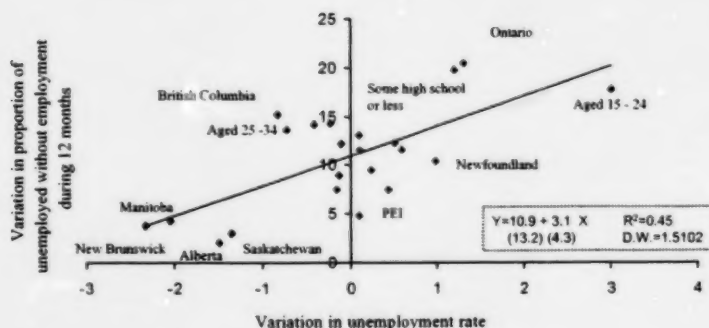
Source: Authors' calculations based on data from Labour Force Survey

Contrary to the two previous categories of unemployed without recent employment, the relationship between the proportion of unemployed without recent employment who were working prior to their unemployment spell and the unemployment rate showed no evidence of structural break during the economic slowdown of 1996. However, as shown in Figure 13, there is a certain persistence effect in the proportion of unemployed without recent employment after each of the last two recessions. That is, the proportion of unemployed without recent employment who were working before becoming unemployed increased by 2.3 percentage points between 1980 and 1989 and by 2.8 percentage points between 1989 and 1999. This persistence effect suggests that unemployment will have to improve substantially before the proportion of unemployed without recent employment who worked before becoming unemployed can return to a level similar to that prior to the 1990-1991 recession.

5.4 What is the scope of this structural change?

In the following section, we will attempt to quantify the extent of the structural break which occurred in the relationship between the proportion of unemployed without recent employment and the unemployment rate using two methods. The first consists of a simple regression analysis of the correlation between the increase in the unemployment rate over the period of 1989-99 and the variation in the proportion of unemployed without recent employment for the various characteristics of the individuals in our sample. The results of this analysis are illustrated in Figure 14.

Figure 14.
Proportion of unemployed without employment during the last 12 months and unemployment rate: variations between 1989 and 1999



Source: Authors' calculations based on data from Labour Force Survey

Each point in Figure 14 represents a pair in the space constituted by the variation in the unemployment rate and the variation in the proportion of unemployed without recent employment between 1989 and 1999. In total, there are 22 points corresponding to several of the categories – such as sex, age, province and level of education – presented in Appendix Table A1.

The regression statistics presented in Figure 14 suggest a fairly high explanatory power for the relationship between the increase in the proportion of unemployed without recent employment and the unemployment rate given the simplicity of the model and the type of data used – adjusted R squared of 0.45. The slope is 3.1 with a t-statistic higher than 4, and the value of the regression constant is 10.9 with a t-statistic of 13.

These results suggest that each percentage point increase in the unemployment rate over this period would be accompanied by a 3.1 percentage point increase in the proportion of unemployed without recent employment. They also suggest that the bulk (11 of the 13 percentage points) of the increase in the proportion of unemployed without recent employment is most likely structural in nature – due to a change in the relationship between the proportion of unemployed without recent employment and the unemployment rate.

The second method we used to quantify the extent of the structural break that seems to have occurred during the 1990s in the relationship between the proportion of unemployed without recent employment and the unemployment rate is a time-series analysis.

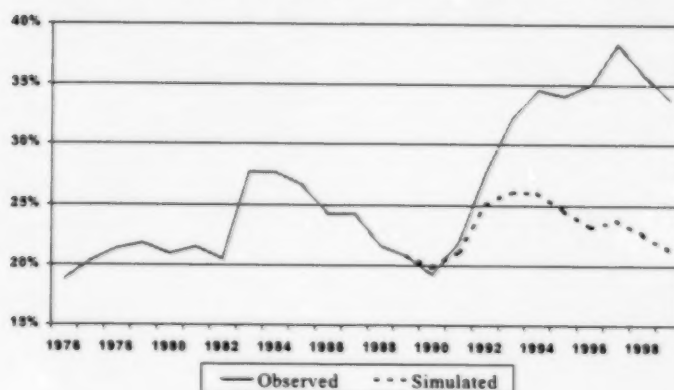
The approach, which is presented in detail in Appendix B, consists of regressing, by ordinary least squares, the proportion of unemployed without recent employment on the proportion of unemployed without recent employment lagged by one year as well as on the unemployment rate, the unemployment rate lagged by one year and two years during the period 1976-1989.

The results of the regressions are then used to simulate what the evolution in the proportion of unemployed without recent employment would have been for the period 1990 to 1999 if the pre-1989 relationship between the proportion of unemployed without recent employment and the unemployment rate would not have changed over the course of the 1990s. The extent of the structural break which seems to have occurred in the relationship between the proportion of unemployed without recent employment and the unemployment rate in the 1990s is represented

by the difference between the simulated proportion of unemployed without recent employment and the observed proportion of unemployed without recent employment.

Thus, we decomposed the evolution of the proportion of unemployed without recent employment as a whole and the evolution of those who were working, studying and managing a home before becoming unemployed separately. Figure 15 illustrates the result of the simulation of the evolution of the total proportion of unemployed without recent employment, and Table 6 presents the results for the unemployed without recent employment as a whole and for main activity before unemployment. The detailed results and the regression analyses – as well as a detailed explanation of the methodology – are presented in Appendix B.

Figure 15.
Simulation of changes in proportion of unemployed without recent employment from 1990 to 1999



Source: Authors' calculations based on data from Labour Force Survey

Overall, the results of this exercise support the finding in Figure 14: the bulk of the increase in the proportion of unemployed without recent employment since 1989 appears to be structural in nature. Specifically, the simulation results indicate that if no structural change had occurred in the relationship between the proportion of unemployed without recent employment and the unemployment rate during the 1990s, the proportion of unemployed without recent employment in 1999 would have been 21.3 percentage points, that is essentially the same level as in 1989 (20.8 percentage points). On that basis, we estimate that the 13 percentage point increase in the proportion of unemployed without recent employment between 1989 and 1999 is almost entirely

(12.5 of the 13 percentage points) due to the structural break observed in the relationship between the latter and the unemployment rate.

Our estimates also indicate a far more pronounced structural break among unemployed who were managing a home before their unemployment spell than among those who were working before becoming unemployed. For the unemployed without recent employment who were studying before becoming unemployed, our estimates indicate that there is only a very minor relationship between the unemployment rate and the proportion of total unemployment made up by this group of unemployed.

In fact, for the unemployed without recent employment who were studying before becoming unemployed, our results indicate that there is only a very tenuous link between the proportion of unemployed without recent employment belonging to this group and the evolutions in the unemployment rate. Consequently, *ceteris paribus*, the proportion of unemployed who were studying prior to their unemployment could remain relatively high over the coming years, even if Canada's economy continues to improve.

In the case of unemployed without recent employment who were managing a home, the findings in Table 6 suggest that their share of total unemployment would have been 6.2 percentage points, compared to 8.9 percentage points, if the relationship between the proportion of unemployed without recent employment who managed a home and the unemployment rate had not changed since 1990 – a difference of 2.7 percentage points.

Table 6: Estimated increase in the proportion of unemployed without recent employment unrelated to the unemployment rate, by main activity before becoming unemployed, between 1989 and 1999

	Proportion of unemployed without recent employment			Increase unrelated to unemployment rate	
	1989	1999		percentage points	percent of observed increase
		observed	simulated		
Total	20.81	33.86	21.31	12.55	96
Worked	7.53	10.33	7.95	2.38	85
Studied	3.79	10.85	3.93	6.89	97
Managed a home	6.01	8.91	6.22	2.69	93

Finally, the results of the estimates found in Table 6 also show the existence of a structural break in the relationship between the proportion of unemployed without recent employment who worked before becoming unemployed and the unemployment rate. In fact, if no structural change had occurred, the proportion of unemployed without recent employment who worked before becoming unemployed would have been 2.4 percentage points lower in 1999. Thus, even if the situation for these unemployed continues to improve in step with continuing improvements in the employment situation, it seems that for a given unemployment rate, the proportion of unemployed without recent employment who worked before becoming unemployed will remain higher than before.

In short, if the economy and employment continue to perform well, this will likely help certain categories of these unemployed individuals – such as the unemployed who were working prior to their unemployment spell – to rejoin the labour market. However, even if the current economic recovery continues for a few more years, it will likely not reduce long-term unemployment to pre-recession levels, given the significant structural break in the relationship between the proportion of unemployed without recent employment and the unemployment rate.

5.5 Avenues for research on possible structural causes

The possible causes of the structural increase in the proportion of unemployed without recent employment fall into two categories.

On one hand, the increase could have been caused by a decline in the employability of the unemployed. For example, it is possible that the gap between the skills possessed by the unemployed without recent employment and those required by employers widened during the 1990s. In this regard, note that between 1990 and 1998, the number of jobs held by people without a high school diploma dropped by nearly a million. As a proportion of total employment, the number of jobs held by individuals without a high school diploma went from 27 percent in 1990 to only 18 percent in 1998. Over this period, the number of unemployed without recent employment who had not finished high school rose by 78,000. In 1998, 40 percent of the unemployed without recent employment had not completed high school, as compared to 33 percent for the unemployed population as a whole, and 19 percent for the labour force population as a whole.

On the other hand, the increase could have been caused, at least in part, by a reclassification phenomenon of the status of the jobless. According to this hypothesis, originally put forward by Card and Riddell (1993),² jobless Canadians are more prone now than before to classify themselves as unemployed rather than inactive.

Card and Riddell (1993),³ in analysing the causes of the gap between the Canadian and American unemployment rates during the 1980s, attributed this gap mostly to the fact that jobless Canadians are more likely to declare that they are looking for work than their American counterparts. The gap between jobless Canadians' and jobless Americans' propensity to look for work widened during the 1980s. One question raised by the authors, which remains unanswered, is whether the increase in this propensity is the product of a genuine increase in the jobless attachment to the labour market or of a jobless reclassification phenomenon, whereby the jobless, for a variety of reasons, could declare they are looking for work without possessing a genuine attachment to the labour market. In other words, these could be people who in the past declared themselves inactive, but now for one reason or another are saying that they want and are looking for work without having any real hope or intention of finding any.

In the particular case of unemployed without recent employment, this hypothesis seems plausible, particularly among unemployed who have no work experience predating their period of unemployment and among those who were managing a home before becoming unemployed. For example, Figures 16 and 16a through 16h, which illustrate the evolution in the proportion of all jobless without recent employment who are classified as unemployed by the Labour Force Survey by sex, age group and whether or not they have work experience predating their unemployment spell, show relatively larger increases in the proportion of jobless who are classified as unemployed by the LFS among these two groups of unemployed without recent employment than among the other groups.

² Card, D. and W. C. Riddell (1993): "A Comparative Analysis of Unemployment in Canada and in the United States", in *Small Differences That Matter: Labor Markets and Income Maintenance in Canada and United States*, D. Card and R.B. Freeman (ed.) Chicago: University of Chicago Press and NBER, 149-189

³ Ibid.

The greater propensity of jobless Canadians to look for work could be caused by institutional factors. For example, changes aimed at increasing job search activities and labour market participation that were made during the 1990s to provincial social assistance programs could have encouraged certain recipients to look actively for work. The study shows that some 30 percent of unemployed without recent employment received social assistance benefits in 1998. However, additional research is required in order to test this hypothesis more rigorously.

Figure 16.

Proportion of unemployed without recent employment considering themselves unemployed by presence or lack of previous work experience, 1976 - 1999

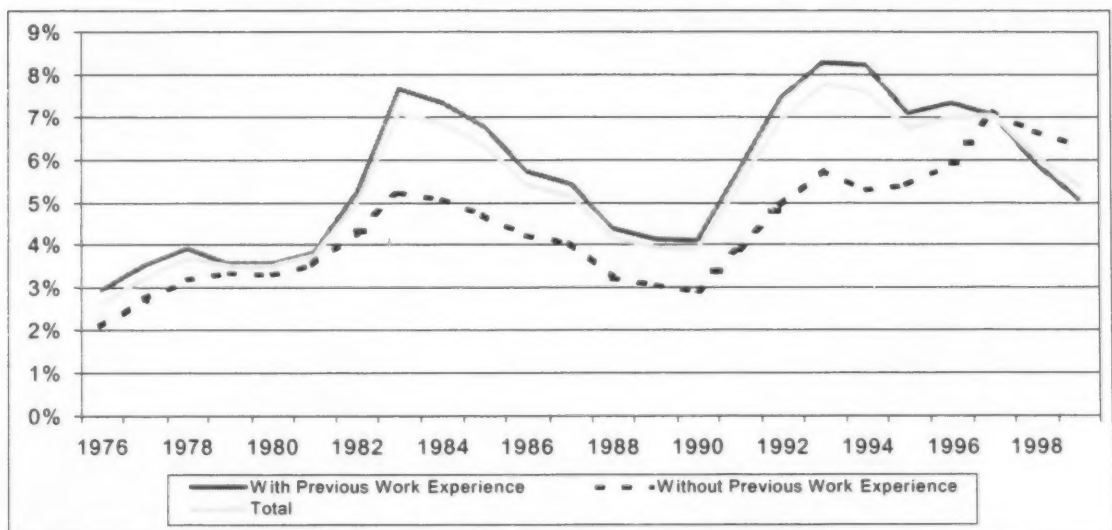


Figure 16 a: Men

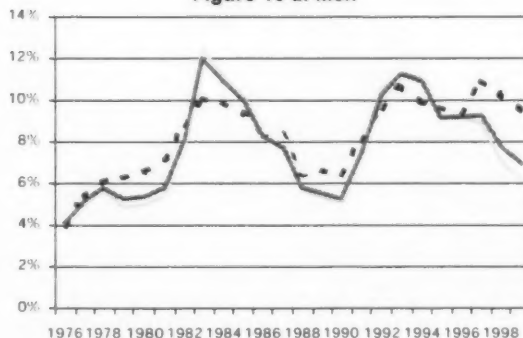


Figure 16 b: Women

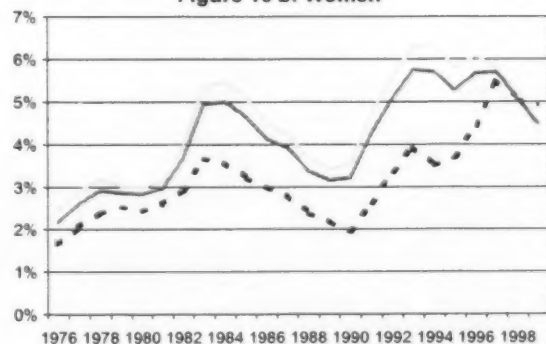


Figure 16 (Cont'd)

Figure 16 c: Men aged 15 - 24

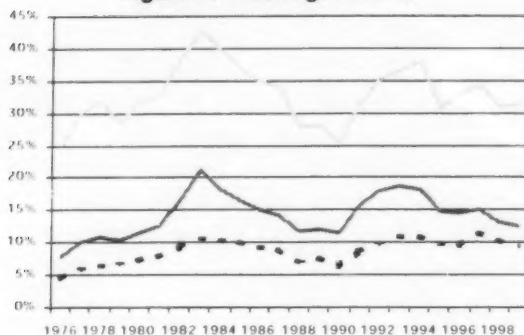


Figure 16 d: Women aged 15 - 24

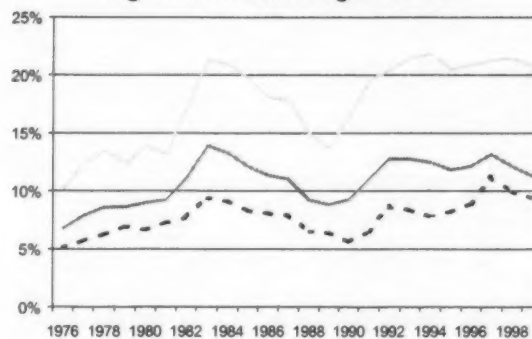


Figure 16 e: Men 25 - 54

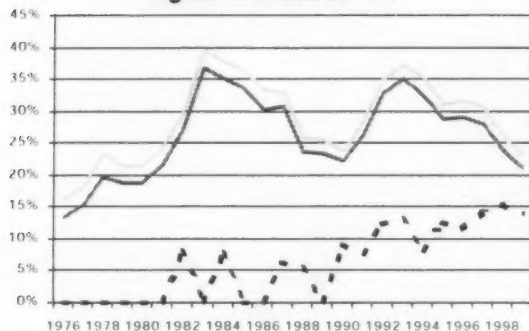


Figure 16 f: Women 25 - 54

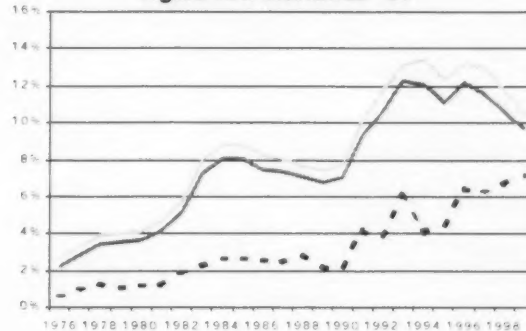


Figure 16 g: Men 55 +

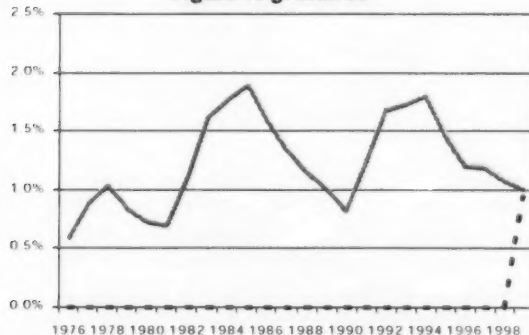
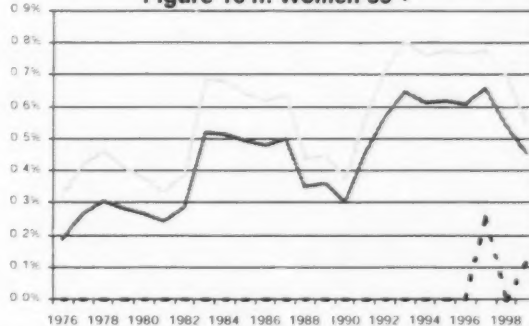


Figure 16 h: Women 55 +



Source: Authors' calculations based on data from Labour Force Survey

6. Conclusions

There is no single profile that emerges from our analysis of the unemployed without recent employment. This category of unemployed of which a large majority are not eligible for Employment Insurance and whose numbers shot up in the 1990s, consists of individuals who differ greatly from one another in terms of their labour market attachment and their personal, financial and family circumstances. The cyclical labour market improvement under way is likely to help the unemployed without recent employment enter or re-enter the labour force. But even if the current economic recovery were to continue for a few years, the relative size of this category would likely not decrease to its 1989 level, before the beginning of the last recession. The econometric estimates contained in this study suggest that the structural break in the relationship between the proportion of unemployed without recent employment and the unemployment rate which occurred in the 1990s is responsible for almost the entire 13 percentage point increase in the proportion of unemployed without recent employment between 1989 and 1999.

If the increase in this category of unemployed individuals reflects an actual increase in problems entering or re-entering the labour market for a growing number of people and if it is not an artificial phenomenon created by reclassifying non-labour force participants as unemployed, it could be useful to create new programs to help this emerging group of people who are excluded from the labour market. In particular, the study showed that 40 percent of unemployed without recent employment had not finished high school in 1998. Nearly half (45 percent) of these unemployed were high school dropouts. The solution for many of the problems encountered by the unemployed without recent employment could involve returning to school and/or improving the employability of these individuals with a low level of education.



Appendix A

Tables

Table A1: The unemployed without recent employment, by main activity before unemployment. Percentage distributions by selected characteristics, 1998

	Worked (152,200)	Studied (145,900)	Managed a home (122,000)	Another activity (41,500)	Managed a home and other (163,500)	Total⁽⁵⁾ (467,600)
Sex						
Male	66.3	50.6	16.7	73.1	31.0	48.7
Female	33.7	49.4	83.3	23.9	69.0	51.3
Age						
15 - 24	8.4	75.5	9.9	18.6	12.1	31.0
25 - 34	21.4	13.9	28.9	24.6	27.8	21.3
35 - 44	31.0	7.4	33.1	27.8	31.8	23.8
45 - 54	25.9	2.8	19.9	18.0	19.4	16.2
55 +	13.3	0.5	8.2	10.9	8.9	7.7
Province						
Newfoundland	3.4	2.8	3.3	2.2	3.0	3.1
PEI	0.3	0.2	0.2	0.3	0.3	0.2
Nova Scotia	3.3	3.0	3.4	2.2	3.1	3.1
New Brunswick	2.5	2.0	2.4	1.9	2.3	2.3
Quebec	42.8	27.7	32.0	24.2	30.0	33.5
Ontario	31.0	40.1	37.4	39.5	37.9	36.3
Manitoba	1.6	1.9	2.3	3.3	2.6	2.0
Saskatchewan	1.4	1.5	1.9	2.3	2.0	1.7
Alberta	2.6	5.0	4.3	4.5	4.3	4.0
British Columbia	11.1	15.7	12.8	19.7	14.5	13.7
Previous work experience	100.0	35.4	79.6	64.4	75.8	70.8
Duration of unemployment spell						
Short-term	25.7	87.2	78.5	75.8	77.8	64.1
Long-term	74.3	12.8	21.5	24.2	22.2	35.9
Level of education						
Did not finish high school	33.3	50.4	35.4	38.4	36.1	39.7
High school diploma	20.8	13.7	23.7	18.1	22.3	19.0
Some post-secondary	8.7	14.2	8.6	6.8	8.1	10.3
Post-secondary degree	37.1	21.7	32.3	36.7	33.5	31.0
Employment Insurance⁽¹⁾	20	1	6	5	6	9
Social assistance⁽²⁾	37	15	40	20	35	29

Table A1 (Cont'd)

	Worked (152,200)	Studied (145,900)	Managed a home (122,000)	Another activity (41,500)	Managed a home and other (163,500)	Total ⁽⁵⁾ (467,600)
Main source of income						
Parents	9	54	3	12	5	22
Employment income ⁽³⁾	24	13	43	36	41	27
Employment Insurance ⁽³⁾	0	1	1	4	2	1
Social assistance	39	15	40	20	35	30
Other	27	16	13	27	16	19
Not available	0	2	0	1	0	1
Insufficient income⁽⁴⁾	54	44	32	47	36	40

(1) The person received Employment Insurance benefits since their last job.
 (2) The person or a household member received social assistance benefits.
 (3) ... of spouse or other household members.
 (4) Household income is insufficient to meet all or most of their regular monthly expenses. This variable does not take into account respondents who receive financial support from their parents.
 (5) Total includes 6,000 individuals set to start a job in the coming weeks, for whom the LFS does not define any main activity before unemployment. As a result, it slightly exceeds the total of the other categories.

Source: The data by sex, age, province, duration of unemployment and level of education are taken from Statistics Canada's Labour Force Survey (LFS). The data on social assistance, main source of income and income sufficiency are taken from the Employment Insurance Coverage Survey (EICS).

Table A2: The unemployed without recent employment who were studying before becoming unemployed. Percentage distributions by selected characteristics, 1998

	Full-time students (51,600)	Dropouts (32,000)	In transition (54,700)	Part-time students (7,600)	Total (145,900)
Sex					
Male	47.0	56.4	50.6	51.4	50.6
Female	53.0	43.6	49.4	48.6	49.4
Age					
15 - 19	86.0	74.6	21.0	34.8	56.4
20 - 24	8.7	14.7	31.4	17.9	19.0
25 +	5.3	10.8	47.6	47.3	24.5
Province					
Newfoundland	1.3	3.5	3.9	3.0	2.8
PEI	0.2	0.2	0.1	0.1	0.2
Nova Scotia	3.2	4.1	2.5	1.2	3.0
New Brunswick	1.6	2.4	2.8	0.6	2.0
Quebec	22.1	27.9	33.6	21.6	27.7
Ontario	48.0	38.2	33.4	43.2	40.1
Manitoba	2.2	2.4	1.4	1.4	1.9
Saskatchewan	1.3	2.1	1.4	0.6	1.5
Alberta	5.6	5.5	4.1	6.1	5.0
British Columbia	14.6	13.8	16.8	22.2	15.7

Table A2 (Cont'd)

	Full-time students (51,600)	Dropouts (32,000)	In transition (54,700)	Part-time students (7,600)	Total (145,900)
Previous work experience	18.9	23.1	56.1	51.8	35.4
Duration of unemployment					
Short-term	93.9	86.6	81.8	84.0	87.2
Long-term	6.1	13.4	18.2	16.0	12.8
Level of education					
Did not finish high school	75.2	100.0	0.0	36.4	50.4
High school diploma	6.2	0.0	28.5	15.8	13.7
Some post-secondary	12.8	0.0	23.2	19.0	14.2
Post-secondary degree	5.8	0.0	48.3	28.9	21.7
Employment Insurance⁽¹⁾	n/a	n/a	n/a	n/a	1
Social assistance⁽²⁾	n/a	n/a	n/a	n/a	15
Main source of income					
Parents	n/a	n/a	n/a	n/a	54
Employment income ⁽³⁾	n/a	n/a	n/a	n/a	13
Employment Insurance ⁽³⁾					1
Social assistance	n/a	n/a	n/a	n/a	15
Other	n/a	n/a	n/a	n/a	16
Not available	n/a	n/a	n/a	n/a	2
Insufficient income⁽⁴⁾	n/a	n/a	n/a	n/a	44

(1) The person received Employment Insurance benefits since their last job.

(2) The person or a household member received social assistance benefits.

(3) ... of spouse or other household members.

(4) Household income is insufficient to meet all or most of their regular monthly expenses. This variable does not take into account respondents who receive financial support from their parents.

n/a: Estimate not available due to the excessive variability of the estimates on account of the size of the sample.

Source: The data by sex, age, province, duration of unemployment and level of education are taken from Statistics Canada's Labour Force Survey (LFS). The data on social assistance, main source of income and income sufficiency are taken from the Employment Insurance Coverage Survey (EICS).

Appendix B

Estimated extent of structural break in relationship between the proportion of unemployed without recent employment and the unemployment rate

Appendix B presents the methodology as well as the data used to estimate the extent of the structural break in the relationship between the proportion of unemployed without recent employment and the unemployment rate.

Data and estimation method

As mentioned in Section 5, the approach used in this paper consists of regressing the proportion of unemployed without recent employment, denoted by $UWRE$, by ordinary least squares on the proportion of unemployed without recent employment lagged by a year as well as on the unemployment rate, denoted by UR , the unemployment rate lagged by one and by two years over the period 1976 – 1989.

We also estimated the evolution of the proportion of unemployed without recent employment by the main activity of the unemployed prior to their unemployment; i.e., whether they were working, were studying or were managing a home before becoming unemployed. Thus, we estimated four equations.

The four estimated equations have the following functional form:

$$\Delta UWRE_{t,i} = \beta_1 L(\Delta UWRE_{t,i}) + \beta_2 \Delta UR_t + \beta_3 L(\Delta UR_t) + \beta_4 L^2(\Delta UR_t)$$

where:

- the symbol Δ represents the first difference in the variable it precedes.
- $UWRE_{t,i}$ represents the proportion of unemployed without recent employment, at time t and belonging to group i (total, were working, were studying, were managing a home).
- UR_t represents the official unemployment rate published by Statistics Canada, at time t .
- $L()$ represents the lag operator.
- $L^2()$ represents the lag operator over two periods.

A priori, when the economy picks up, the first to benefit are the most employable of the unemployed individuals. As shown in the present study, these are unemployed individuals who

have worked at some point over the past 12 months. Next come those who are “less employable” – the unemployed without recent employment. Since the dependent variable is the proportion of unemployed without recent employment, this is expected to increase early on during an economic recovery. It subsides only later in the recovery. The cyclical variables lagged by one period and two periods capture this phenomenon. Tests carried out on the structure of the cyclical variables’ lag reject the addition of additional lags.

The four equations are estimated in first differences by ordinary least squares (OLS). The estimate results can be found in Tables B.1 through B.4.

Method of calculating the extent of the structural break

The extent of the structural break in the relationship between the proportion of unemployed without recent employment and the unemployment rate is estimated, first, by simulating the evolutions in the proportion of unemployed without recent employment over the period of 1990 – 1998 using the results of the regressions found in Tables B2 through B4. Next, we simply use the gap between the observed proportion of unemployed without recent employment and the results obtained while using the simulations in order to approximate the extent of the structural break in the relationship between the proportion of unemployed without recent employment and the unemployment rate during the 1990s.

Results of estimates

Table B.1: Estimate of relationship between proportion of unemployed without recent employment and unemployment rate, 1976 – 1989

<i>Total proportion</i>	<i>coefficients</i>	<i>stand. dev.</i>	<i>stat-t</i>	<i>p-value</i>
$L[\Delta(\text{Unemployed individuals WRE})]$	-0.68901	0.23349	-2.95088	0.0214
$\Delta(\text{Unemployment rate})$	-0.00084	0.00213	-0.39578	0.7041
$L[\Delta(\text{Unemployment rate})]$	0.19304	0.00225	8.58383	0.0001
$L^2[\Delta(\text{Unemployment rate})]$	0.00856	0.00498	1.71962	0.1292
R^2 :	0.935258			
Adjusted R^2 :	0.907512			
Standard deviation of regression:	0.007970			
Durbin Watson :	2.241863			

Table B.2: Estimate of relationship between the proportion of unemployed without recent employment and the unemployment rate, 1976 – 1989

<i>Previous activity: working</i>	coefficients	stand. dev.	stat-t	p-value
L[Δ(Unemployed WRE: working)]	-0.53696	0.25873	-2.07539	0.0766
Δ(Unemployment rate)	0.00311	0.00180	1.72266	0.1286
L[Δ(Unemployment rate)]	0.01382	0.00209	6.61377	0.0003
L ² [Δ(Unemployment rate)]	0.00258	0.00334	0.77203	0.4654
R ² :	0.899303			
Adjusted R ² :	0.856147			
Standard deviation of regression:	0.006817			
Durbin Watson:	1.647106			

Table B.3: Estimate of relationship between the proportion of unemployed without recent employment the and unemployment rate, 1976 – 1989

<i>Previous activity: studying</i>	coefficients	stand. dev.	stat-t	p-value
L[Δ(Unemployed WRE: studying)]	0.09709	0.36776	0.26400	0.7994
Δ(Unemployment rate)	-0.00013	0.00126	-0.10240	0.9213
L[Δ(Unemployment rate)]	0.00310	0.00131	2.36423	0.0500
L ² [Δ(Unemployment rate)]	-0.00135	0.00160	-0.84814	0.4244
R ² :	0.313280			
Adjusted R ² :	0.018972			
Standard deviation of regression:	0.004690			
Durbin Watson:	2.099157			

Table B.4: Estimate of relationship between the proportion of unemployed without recent employment and the unemployment rate, 1976 – 1989

<i>Previous activity: managing a home</i>	coefficients	stand. dev.	stat-t	p-value
L[Δ(Unemployed WRE: managing a home)]	0.24032	0.51413	0.46743	0.6544
Δ(Unemployment rate)	-0.00352	0.00078	-4.52329	0.0027
L[Δ(Unemployment rate)]	0.00416	0.00201	2.07034	0.0772
L ² [Δ(Unemployment rate)]	-0.00081	0.00202	-0.39800	0.7025
R ² :	0.866739			
Adjusted R ² :	0.809628			
Standard deviation of regression:	0.002335			
Durbin Watson:	1.800001			